#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008140 Address: 333 Burma Road **Date Inspected:** 09-Aug-2009

City: Oakland, CA 94607

**Project Name:** SAS Superstructure OSM Arrival Time: 1900 **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lu Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

**Bridge No:** 34-0006 **Component: OBG** segments

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

#### OBG assembly bay 13

This QA observed ZPMC qualified welding personnel identified as 058100 perform SAW welding on OBG segment 9BE weld joint identified as SEG052\*-003. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA observed ZPMC qualified welding personnel identified as 049339 and 067609 perform SMAW welding on OBG segment 8BW weld joint identified as SEG045A-001. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA observed ZPMC qualified welding personnel identified as 200114 perform SMAW repair welding on OBG segment 8AE weld joint identified as SEG044A-010. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-repair-1.

OBG assembly bay 14

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This QA observed ZPMC qualified welding personnel identified as 055491 perform FCAW welding on OBG segment 9BE weld joint identified as SSD17-PP75-013. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 044795 perform FCAW welding on OBG segment 9BE weld joint identified as SSD17A-PP75-130. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 200113 perform SMAW welding on OBG segment 9AE weld joints identified as SEG050C-002 and 003. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA observed ZPMC qualified welding personnel identified as 202122 perform FCAW welding on corner assembly for OBG segment 10CW weld joint identified as CA77-004. ZPMC QC identified as Mr. Li Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 207465 perform FCAW welding on corner assembly for OBG segment 10CW weld joints identified as CSD2-PP94.5-001~006. ZPMC QC identified as Mr. Li Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as 204730 perform FCAW welding on corner assembly for OBG segment 10CW weld joints identified as CSD2-PP92.5-007~010 and 012~014. ZPMC QC identified as Mr. Li Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4133.

This QA observed ZPMC qualified welding personnel identified as 201215 perform FCAW repair welding on corner assembly for OBG segment 9BW weld joints identified as CSD3-PP74-086, 090 and 094. ZPMC QC identified as Mr. Li Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-3G (3F)-repair.

This QA observed several ZPMC personnel fitting and tack welding floor beam section identified as FB028-008 to floor beam identified as FB003-138 and side panel identified as SP627-001. This floor beam was being fit on OBG segment identified as 9DE at panel point (PP) 082.

Outside OBG segments 7DW, 7BW, 7EW, 6AW, 6CW, 6CE, 7EE, 7DE, 7CE, 6AE, 7CW, 7BE, 7AW, 6BE, 6BW and 7AE

This QA observed that no significant work was being performed on these segments during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer